

AMENDMENT

Please enter the following amendments:

IN THE CLAIMS

Please amend claim 16 as follows:

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16. (Amended) A method of carbon monoxide hydrogenation comprising:
- (a) providing a catalyst structure in a reactor, wherein the catalyst structure comprises a porous structure having a catalyst thereon, wherein the catalyst structure comprises a foam, felt, wad, or combination thereof;
 - (b) passing a feed stream comprising carbon monoxide gas and hydrogen gas through the catalyst structure; and
 - (c) heating the catalyst structure to at least 200°C;
- wherein the feed stream has a residence time in the reactor of less than five seconds; and
- wherein a product stream is obtained that exhibits the properties of at least a 25% conversion of carbon monoxide and at most 25% selectivity toward methane.

Please cancel claim 14 without prejudice or disclaimer.

Please add new claims 18-24 as follows:

B²

-- 7/ 18. The method of claim 10 wherein the interfacial layer is continuous.

8/ 19. The method of claim 18 wherein the porous structure comprises a foam, felt, wad

and combinations thereof.

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20. The method of claim 19 wherein the porous structure comprises a metal foam.

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21. The method of claim 20 wherein metal foam has pores that range from 20 pores per inch to 1000 pores per inch.

22. The method of claim 16 wherein the catalyst structure comprises a porous structure, an interfacial layer, a buffer layer disposed between the porous structure and the interfacial layer.

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23. The method of claim 22 further comprising a catalyst layer deposited on the interfacial layer.

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24. The method of claim 23 wherein the ratio of hydrogen to carbon monoxide ranges from 2:1 to 3.5:1.

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